



A CUP OF HEALTH WITH CDC

What's Biting You?

West Nile Virus Update — United States, January 1–July 22, 2008

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[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC — safer, healthier people.

[Dr. Gaynes] Welcome to *A Cup of Health with CDC*, a weekly feature of the MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Robert Gaynes.

Summertime is the best time for getting away from it all and enjoying the great outdoors. But nothing can ruin that barbecue or camping trip like biting insects. Most insect bites cause only minor irritation; however, they can result in chronic illness or even death. West Nile Virus is a common disease in the United States and is caused by a mosquito bite.

Jennifer Lehman is a researcher with CDC's National Center for Zoonotic, Vector-Borne, and Enteric Diseases. She's joining us today by phone to discuss West Nile Virus. Welcome to the show, Jennifer.

[Jennifer Lehman] Thanks for having me on the show.

[Dr. Gaynes] Jennifer, how many cases of West Nile Virus occur in the United States each year?

[Jennifer Lehman] Well, this is a hard one because the number of West Nile cases varies every year, but our highest total of cases was in 2003, and in more recent years, it's been between three and five thousand cases.

[Dr. Gaynes] Is it more common in any particular region?

[Jennifer Lehman] Yes. In general, the west central states, for example, the Dakotas, Montana, Wyoming, and Colorado have actually had the highest rates of disease. This year, we've seen the highest number of cases so far in California and Mississippi, Texas, and the Dakotas. It's hard to know which areas will be most affected from year to year, and this has to do with weather, the immune status among the birds, human behavior, and many other things. And keep in mind that we still have August and September ahead of us, so it remains to be seen where the most affected areas will be this year.

[Dr. Gaynes] Are there groups of people who are more susceptible to the disease?

[Jennifer Lehman] You know, it's important to remember that anyone can become infected with West Nile Virus, and we certainly have seen severe disease throughout all the age categories. So, there's no one who should not be concerned. Now there are people who are more likely to become severely ill if infected, and these people include people fifty and older and people who have ever received a transplant.

[Dr. Gaynes] Are pets susceptible to this disease?

[Jennifer Lehman] Unvaccinated horses are at risk, as well as other household pets and livestock, and we have a limited number of reports of illnesses in these animals. We also have seen reported to CDC a very small number of dogs and cats, but in most cases, these animals don't show signs of sickness. And remember that West Nile Virus is primarily a cycle between birds and mosquitos, so illness and fatalities in horses we have had, and that was a big concern initially, but now there's a vaccine available for equines.

[Dr. Gaynes] Tell us what symptoms a person who has West Nile Virus might experience.

[Jennifer Lehman] Well, there are three different kinds of categories; we have fever, severe, and asymptomatic. And severe disease is also called, you know, West Nile encephalitis or meningitis, and the symptoms of that include headache, high fever, neck stiffness, maybe coma, tremors, and sometimes even paralysis. Then you have the fever category, and it's estimated that about twenty percent of people who become infected with West Nile Virus will develop West Nile fever. And symptoms of that include fever, headache, maybe some tiredness, and body aches. And most people, about four out of five people, are infected with West Nile Virus — they will not develop any type of illness, and these people are called asymptomatic infections. But remember, you cannot know ahead of time if you'll get sick or not when you are infected.

[Dr. Gaynes] Well, what's the best way to avoid this disease?

[Jennifer Lehman] The most important thing to do is avoid mosquito bites. People can use an effective insect repellent when you go outdoors, and these would be products containing DEET, picaridin, oil of lemon eucalyptus, or IR3535.[®] If it's practical, you should wear long pants and long sleeves for additional protection. But remember, the mosquitos that spread West Nile Virus are most likely to bite from dusk to dawn, so you should be especially careful to use repellent or limit your time outdoors during those hours. You should also empty any standing water around your home, and you could support your community-based mosquito management programs in your area.

[Dr. Gaynes] Jennifer, where can listeners get more information about West Nile Virus?

[Jennifer Lehman] The listeners can get more information about West Nile Virus at www.cdc.gov/westnile — and that's all one word.

[Dr. Gaynes] Jennifer, thanks for sharing this information with our listeners today.

[Jennifer Lehman] It was my pleasure.

[Dr. Gaynes] That's it for this week's show. Be sure and join us next week. Until then, be well. This is Dr. Robert Gaynes for *A Cup of Health with CDC*.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.